



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,809	10/19/2001	Dietmar Rudolph	520.1004	8344
23280	7590	01/26/2006	EXAMINER	
DAVIDSON, DAVIDSON & KAPPEL, LLC 485 SEVENTH AVENUE, 14TH FLOOR NEW YORK, NY 10018			PENDLETON, DIONNE	
			ART UNIT	PAPER NUMBER
			2646	
DATE MAILED: 01/26/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/980,809

Applicant(s)

RUDOLPH, DIETMAR

Examiner

Dionne N. Harvey

Art Unit

2646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 4-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Solondz (US 6,862,447)** in view of **Valentine US 6,353,607** and further in view of **Odenwalder US 2004/0029534 A1**.

Regarding claim 4, in figure 1 and 2, Solondz teaches a method for quality control of a digital radio transmission (*see, column 3, lines 35-36*) comprising: disposing a mobile terminal (*see column 4, lines 19-26*) in or adjacent to a target area, said mobile terminal reading on "receiver station";

column 4, lines 19-26, making operational measurements i.e., "parameter values", based on the received digital signal using the mobile terminal, reading on "evaluating quality data of a received high frequency digital signal using the at least one receiver station so as to determine corresponding parameter values" (*also see, column 1, lines 40-45*);

the mobile terminal then transmits those operational measurements to it's respective base station, which in turn, transmits said operational measurements to a main control unit, MCU 202 which is disposed within the mobile switching center, MSC 200 of the target area, the MSC will then transmit the operational measurements i.e.,

parameters to the broadcast transmitter from which the digital signal originates (**see, column 4, lines 48-49**), which reads on "transmitting the corresponding parameter values to a broadcast transmitter".

Solondz does not clearly teach that transmission of data from the mobile terminal i.e., receiver station to the originating broadcast transmitter is performed automatically via an Internet.

Illustrated in figures 2 and 5, Valentine teaches that in a wireless communication system, the transmission of both non-speech and speech signals between a first MSC and a second MSC, may be provided via an Internet (IP) transport medium, rather than over wireless circuit connections. In **column 3, lines 22-30**, Valentine further teaches that a means for reducing or eliminating the use of wireless circuit connections is desirable since it would free up capacity on the wireless network and thus permit an increased number of cellular phone calls to be placed by the network.

Since Solondz does not restrict his invention to the receipt of operational measurements from base stations (BS) controlled by a single MSC, in such a case where BS2, illustrated in **Figure 1** of Solondz, requests operational measurements from a neighboring BS, which is controlled by a second MSC, the request for operational measurements may be transmitted from the first MSC **200** to a second MSC using an Internet connection, as taught by Valentine. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Solondz and Valentine, thereby providing more bandwidth availability on the network.

The combination of Solondz and Valentine fails to clearly teach that the operational measurements, i.e., parameters, are used to influence at least one of modulation stages and coding of the transmission.

Shown in **figure 2**, and discussed in **page 2, paragraph [0027-0029]**, Odenwalder teaches that parameter measurements, as evaluated by the mobile terminal **204, 206**, are used to produce control messages, which are in turn transmitted to and used by the originating broadcast transmitter so as to adjust the bandwidth (power/rate) of the downlink signal. Furthermore, the modulation and coding of base station transmissions are adapted to optimize forward link transmissions, which reads on “influencing at least one of a number of modulation stages and a coding of the transmission using the transmitted parameter values.” As is well known in the art, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Solondz, Valentine and Odenwalder, using the operational measurements of the receiver station for the purpose of optimizing downlink communications from a broadcast transmitter within a mobile communication system.

Regarding claims 5 and 9, the combination of Solondz, Valentine and Odenwalder does not clearly teach that the method for quality control of a digital radio transmission is for use with a digital radio transmission as recommended by the international telecommunication union (ITU) protocol. However, it would have been obvious for one of ordinary skill in the art at the time of the invention to configure the method of quality control as disclosed by Odenwalder, for use with a broadcast transmission system as recommended by ITU or another protocol, given that said

protocols are well known in the art for providing a standard with respect to telecommunication networks in government and in private-sector, and doing so would increase the applicability of the method for quality control, as taught by Odenwalder and Valentine.

Regarding claims 6 and 10, Odenwalder teaches that the transmission is a broadcast transmission.

Regarding claims 7 and 11, in **figure 2**, and discussed in **column 4, paragraph [0040-0041]**, Odenwalder teaches memory **207** for storing signal samples at the target frequency, and appears to teach that based upon the stored parameter values, a frequency prognosis is performed.

Regarding claim 8, as set forth in the rejection of claim 4, the combination of Solondz and Valentine teach a method for broadcast monitoring and a control system wherein a mobile terminal is disposed in or adjacent to a target area, said mobile terminal reading on “at least one receiver station”;

In **column 4, lines 19-26**, Solondz teaches making operational measurements i.e., “parameter values”, based on the received digital signal using the mobile terminal, reading on “evaluating quality data of a received high frequency digital signal using the at least one receiver station so as to determine corresponding parameter values” (**also see, column 1, lines 40-45**);

the mobile terminal then transmits those operational measurements to it's respective base station, which in turn, transmits said operational measurements to a main control unit, MCU **202** which is disposed within the mobile switching center, MSC

200 of the target area, the MSC will then transmit the operational measurements i.e., parameters to the broadcast transmitter from which the digital signal originates (**see, column 4, lines 48-49**), which reads on “transmitting the corresponding parameter values to a broadcast transmitter”.

Figures 2 and 5 of Valentine are relied upon as teaching the transmission of data via an Internet connection.

While **page 3, paragraph [0034] – page 4, paragraph [0043]**, of Odenwalder teaches that during the evaluation of a received signal from a broadcasting transmitter from a receiver station, an inter-frequency search is performed, thus reading on “determining alternative transmit frequencies using transmitted corresponding parameter values”.

2. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Solondz (US 6,862,447)** in view of **Odenwalder US 2004/0029534 A1**, and further in view of **Mayo US 5,133,081**.

Regarding claim 12, in **figure 2**, the combination of Solondz and Odenwalder teaches providing a power control message signal, said power control message signal reading on “a backward channel” for digital signals received in a target area; and using said power control message signal to provide a high reception quality and coverage reliability, as broadly claimed.

The combination of Solondz and Odenwalder does not clearly teach that the transmitter is an AM transmitter.

In **column 20, lines 27-31**, Mayo teaches that the use of an AM transmitter meeting FCC guidelines is well known in the art. It would have been obvious for one of ordinary skill in the art at the time of the invention to use an AM transmitter in the broadcast monitoring and control system of Solondz and Odenwalder, given that said transmitters characteristically exhibit a longer range thereby negating the need for a repeater in the broadcasting system.

Response to Arguments

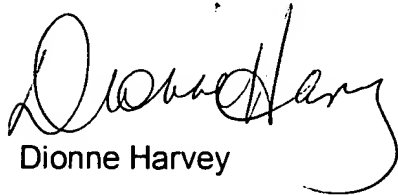
3. Applicant's arguments with respect to claims 4-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne N Harvey whose telephone number is 571-272-7497. The examiner can normally be reached on 9-6:30 M-F and alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran should be reached. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dionne Harvey



DUCNGUYEN
PRIMARY EXAMINER